



New Haven, CT School Bus Retrofit Project Fact Sheet

Students Breathing Dirty Air

- 387,000 children ride 6,100 school buses each day in Connecticut. Of the 6,100 school buses, 99% run on diesel fuel.
- The amount of time a child spends on a school bus varies from 20 minutes to several hours each day.
- Children are more sensitive to air pollution due to a higher intake of air per pound of body weight than that of adults.
- Diesel exhaust is a significant contributor to air pollution and has been classified as a probable human carcinogen by the Environmental Protection Agency (EPA).
- Diesel exhaust exacerbates asthma and causes inflammation of the airways.

New Haven School Bus Retrofit Project

- The New Haven School Bus Retrofit Project will reduce the diesel emissions from school buses by introducing cleaner fuels and new emission control technology.
- 182 New Haven school buses will be retrofitted with emission control technology.
- Currently, all New Haven First Student school buses run on Ultra-Low-Sulfur Diesel (ULSD).
- 182 New Haven school buses will be retrofitted with emission control technologies.
- The emission control technologies include the use of Donaldson Company's diesel oxidation catalyst (DOC) and their Spiracle closed crankcase ventilation system, which virtually eliminates exhaust emissions from the crankcase of the engine. A clean fuel additive known as a fuel borne catalyst (FBC) produced by Clean Diesel Technology Inc. will be added to the already in place ultra low sulfur diesel fuel (ULSD) to further advance emission reductions.
- At a minimum, emissions of fine particulate and carbon monoxide are expected to be reduced by 40 percent, hydrocarbons will be reduced by 45 percent. In addition, a small reduction in nitrogen oxides is expected.
- The project is expected to significantly reduce risk exposure to children and improve regional air quality.
- By 2007, all new school buses will be built with emission control technology and will be fueled with ultra-low sulfur diesel.

Clean Bus Program and Anti-Idling

- Reducing idling from school buses will help reduce diesel emissions and reduce the air pollution around the school environment.
- School buses cannot idle for more than three minutes under state law.
- To remind school bus drivers and the general public about their obligation to not idle their vehicles, DEP, with the help of the Connecticut Department of Transportation (DOT) is introducing its new anti-idling signage program. Research has shown that constant reminders in the form of signs should significantly improve compliance rates with the idling restriction.
- Beginning in New Haven and the City of Norwich, DEP will provide a pair of anti-idling signs to Connecticut public schools for voluntary posting in school bus loading areas. A regulatory sign will clearly inform vehicle drivers that they may not idle for more than three minutes, and will also be used throughout the state to raise awareness of the idling issue at rest areas in cooperation with DOT. An informational sign will supplement the regulatory one, to let people know that by not idling they are helping to protect air quality.

Connecticut Schools Air Quality Curriculum

- The Connecticut Schools Air Quality Curriculum was created to educate young people on the Connecticut Clean Bus Program and the need to promote clean air.
- The Connecticut Schools Air Quality Curriculum teaches children about sources of air pollution, how it affects people and the environment, and what the students can do to be leaders for the environment.
- In conjunction with a successful retrofit project in Norwich, Connecticut, two Norwich middle schools implemented the Connecticut Schools Air Quality Curriculum in the spring and fall of 2003.
- The Connecticut Schools Air Quality Curriculum will be implemented in several New Haven Middle Schools.
- Boys and Girls Clubs throughout the state of Connecticut actively used activities from the Connecticut Schools Air Quality Curriculum in the summer of 2003.